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Philippe Bastien

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10/27/2010

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EXAMINER

KANAAN, MAROUN P

ART UNIT

PAPER NUMBER

3626

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DELIVERY MODE

10/27/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/517,391 | <b>Applicant(s)</b><br>BASTIEN ET AL. |  |
|                              | <b>Examiner</b><br>MAROUN KANAAN     | <b>Art Unit</b><br>3626               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 10 August 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-85 and 92-97 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-85, and 92-97 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

**Status of Claims**

1. This action is in reply to the application 10517391 filed on 12/03/2009
2. Claims 1-85, and 92-97 are currently pending and have been examined.
3. Claims 86-91 have been canceled.
4. Claims 95-97 have been amended.
5. **The applicant's amendments to the claims 95-97 overcome the 35 USC § 101 rejection. The 35 USC § 101 rejection has been withdrawn.**

**Previous Status of Claims**

6. This action is in reply to the application 10517391 filed on 12/03/2009
7. Claims 1-85, and 92-97 are currently pending and have been examined.
8. Claims 86-91 have been canceled.
9. Claims 92-97 have been added.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-5, 7-18, and 20-26, are rejected under 35. U.S.C 103(a) as being unpatentable over Huyn et al. (US 2002/0035486 A1) in view of Goldman et al. (US 2002/0082738 A1).**

12. As per claim 1 Huyn teaches *a diagnostic method, the method being executed by a computer system and comprising:*

- *providing a first question* (See at least Huyn, Para. 0014);
- *receiving first information reflecting an answer to the first question* (See at least Huyn, Para. 0014);
- *providing the second question* (See at least Huyn, Para. 70, wherein a primary question triggers presentation of secondary questions).
- *receiving second information reflecting an answer to the second question* (See at least Huyn, Para. 70, wherein positive responses to the secondary questions trigger further hierarchical levels of questions).

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- *and determining, via the computer system, a diagnosis according to the diagnostic algorithm (See at least Para. 0100, wherein patients receive diagnosis medical summary).*
- *selecting, via the computer system, a second question according to the first information and according to a diagnostic algorithm generated using at least one of a multivariate analysis and a tree segmentation technique (See at least Huyn Para. 92, wherein secondary questions are presented based on the response of the first question).*

Huyn does not explicitly teach however Goldman teaches a multivariate analysis and a tree segmentation technique (See at least at least Goldman (Para. 72, wherein CART, CHAID that are both data mining techniques/multivariate analysis are taught, and decision tress and neural empirical modeling is also taught). It would have been obvious to one of ordinary skill in the medical art to combine computer-implemented questionnaire system as taught in Huyn (Para. 3) with the data analysis and mining technique as taught in Goldman (Para. 72). The combination would lead to questions that are selected dynamically as the subject responds to questions (Huyn Para. 37).

13. As per claim 2-5, Huyn teaches the claim limitations of claim 1. Huyn does not explicitly teach, however Goldman teaches:
14. *In claim 2, the method according to claim 1, wherein the diagnostic algorithm is generated using at least the multivariate analysis, and the multivariate analysis includes at least one of a principal component analysis, a factorial analysis, PLS path modeling, and structural equation modeling (See at least Goldman, Para. 8 wherein factorial process is taught). The motivation to combine references is the same as seen in claim 1.*

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15. *In claim 3, the method according to claim 1, wherein the diagnostic algorithm is generated using at least the tree segmentation technique, and the tree segmentation technique includes a classification and regression tree method (See at least Goldman, Claim 5, wherein regression tree (CART) is taught). The motivation to combine references is the same as seen in claim 1.*
16. *In claim 4, the method according to claim 3, wherein the classification and regression tree method is at least one of a CART method, a CHAID method, and a QUEST method (See at least Goldman, Claim 5, wherein regression tree (CART) is taught). The motivation to combine references is the same as seen in claim 1.*
17. *In claim 5, the method according to claim 1, wherein the diagnostic algorithm is a diagnostic algorithm generated using at least both the multivariate analysis and the tree segmentation technique (See at least Goldman, Para. 4, wherein various analysis is taught, and see also Para. 8 and Claim 5 where both techniques are taught). The motivation to combine references is the same as seen in claim 1.*

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18. As per claim 7, Huyn teaches *the method according to claim 1, wherein the first question is a most discriminating question according to the tree segmentation technique* (See at least Para. 0070, wherein the first question is the broadest question).
19. As per claim 8, Huyn teaches *the method according to claim 7, wherein the second question is, according to the tree segmentation technique and the answer to the first question, a second most discriminating question* (See at least Para. 0070 wherein the second question is the second broadest question and each question afterwards triggers a more specific question).
20. As per claim 9, Huyn teaches *the method according to claim 1, wherein at least one of the first information and the second information is received from a remote location over a network* (See at least Para. 0101, wherein the questionnaire can be completed over the web).
21. As per claim 10, Huyn teaches *the method according to claim 9, wherein the network is at least one of an internet, an intranet, a wireless network, and a wired network* (See at least Para. 0101, wherein the questionnaire can be completed over the web).
22. As per claim 11, Huyn teaches *the method according to claim 1, wherein at least one of the first information and the second information is received from a portable electronic device* (See at least Para. 0101).

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23. As per claim 12, Huyn teaches *the method according to claim 11, wherein the portable electronic device is at least one of a handheld personal computer, a telephone, a mobile phone, a television set, and a personal organizer* (See at least Para. 0047 wherein a handheld personal computer is taught).
24. As per claim 13, Huyn teaches *the method according to claim 1, further comprising:*
- *selecting at least one subsequent question according to the diagnostic algorithm* (See at least Para. 0071);
  - *providing the at least one subsequent question* (See at least Para. 0071);
  - *and receiving subsequent information reflecting at least one answer to the at least one subsequent question* (See at least Para. 0071).
25. As per claim 14, Huyn teaches *the method according to claim 13, wherein the selecting and providing of at least one subsequent question continues until the determining of the diagnosis* (See at least Fig. 10B).
26. As per claim 15, Huyn teaches the method according to claim 1, wherein the diagnostic algorithm is a diagnostic algorithm generated by at least:
- *receiving, from a plurality of individuals, initial information reflecting answers to initial questions* (See at least Para. 0107);
  - *performing the multivariate analysis on the initial information received from the plurality of individuals to generate at least one synthetic variable* (See at least Fig. 18);



- *and generating the diagnostic algorithm from at least the synthetic variable using the tree segmentation technique (See at least Fig. 18).*
- 27.** As per claim 16, Huyn teaches *the method according to claim 1, wherein at least one of providing the first question and providing the second question comprises presenting, respectively, the first question or the second question at least one of over a network, at a kiosk, in a waiting room, at home, and at a point-of-sale (See at least Para. 0101, wherein the questionnaire can be completed over the web).*
- 28.** As per claim 17, Huyn teaches *the method according to claim 16, wherein at least one of providing the first question and providing the second question comprises presenting, respectively, the first question or the second question at least over the network, and the network includes at least one of an internet, an intranet, a wireless network, and a wired network (See at least Para. 0101, wherein the questionnaire can be completed over the web).*
- 29.** As per claim 18, Huyn teaches *the method according to claim 16, wherein at least one of providing the first question and providing the second question comprises presenting, respectively, the first question or the second question at least at the kiosk and the kiosk includes a display to present at least one of the first question and the second question (See at least Fig. 10B).*
- 30.** As per claim 20, Huyn teaches *the method according to claim 1, wherein the diagnosis is at least one of a dermatological diagnosis, a beauty diagnosis, and a cosmetic diagnosis (See at least Fig. 14 wherein a graphical analysis is displayed for skin care questions).*

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31. As per claim 21, Huyn teaches *the method according to claim 1, wherein the diagnosis relates to at least one of a skin characteristic and a keratin characteristic* (See at least Fig. 14 wherein a graphical analysis is displayed for skin care questions).
32. As per claim 22, Huyn teaches *the method according to claim 21, wherein the diagnosis relates to at least the keratin characteristic, and the keratin characteristic relates to at least one of a hair, a nail, an eyelash, and an eyebrow* (See at least Fig. 15).
33. As per claim 23, Huyn teaches *the method according to claim 1, wherein the diagnosis relates to at least one of a skin condition and a keratin condition* (See at least Fig. 15).
34. As per claim 24, Huyn teaches *the method according to claim 23, wherein the diagnosis relates to at least the keratin condition, and keratin condition relates to at least one of a hair, a nail, an eyelash, and an eyebrow* (See at least Fig. 15).
35. As per claim 25, Huyn teaches *the method according to claim 23, wherein diagnosis relates to at least the skin condition, and the skin condition includes at least one of greasy skin, dry skin, aging skin, wrinkled skin, marked skin, flask skin, squeamish skin, sensitive skin, skin phototype, a pigmented spot of skin, a problem with an eyelid, skin topography, a sensitive lip, a wrinkle around a lip, acne, and eczema* (See at least Para. 0069).
36. As per claim 26, Huyn teaches *the method according to claim 23, wherein the diagnosis relates to at least the keratin condition, and the keratin condition includes at least one of hair loss, hair shine, hair thickness, hair oiliness, hair health, hair graying, and hair color* (See at least Fig. 15).

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**Claims 19, 27-35, and 62-67 are rejected under 35. U.S.C 103(a) as being unpatentable over Huyn et al. (US 2002/0035486 A1) in view of Sun et al. (US 2002/0022973 A1).**

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37. In regards to claim 19, Huyn teaches the claim limitations of claim 16, however Huyn does not explicitly teach but Sun teaches *the method according to claim 16, wherein at least one of providing the first question and providing the second question comprises presenting, respectively, the first question or the second question at least at the kiosk and the point-of-sale, and the point-of-sale is at least one of a product-selling store, a service providing location, and a website* (See at least Sun, Para. 0114, wherein the point-of-sale is a website). It would have been obvious to combine a computer-implemented questionnaire system for obtaining clinical data from subjects taught in Huyn with the questionnaire system offering recommended products for sale in Sun. The combination would enhance the way patients receive medical advice/services.
38. In regards to claim 27, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches *further comprising selecting at least one product according to, at least in part, the diagnosis* (See at least Sun, Para. 0092 wherein prescribed or recommended medical treatment is taught). The motivation to combine both arts is the same as claim 19.
39. In regards to claim 28, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches *further comprising offering the product for sale* (See at least Sun, Para. 0114). The motivation to combine both arts is the same as claim 19.
40. In regards to claims 29 and 30, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches wherein the product includes at least one of a good and a service (See at least Sun, Para. 0114 wherein a good product is shown and Para. 0115 wherein a service product is shown). Sun does not explicitly teach the product is a beauty product but that is a design choice and does not alter the claim limitations of the application. The motivation to combine both arts is the same as claim 19.

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41. In regards to claim 31, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches *further comprising providing at least one of advice and a recommendation according to, at least in part, the diagnosis* (See at least Sun, Para. 0076). The motivation to combine both arts is the same as claim 19.
42. In regards to claim 32, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches *further comprising selecting at least one subject individual according to, at least in part, the diagnosis* (See at least Sun, Fig. 5H wherein a patient is selected). The motivation to combine both arts is the same as claim 19.
43. In regards to claims 33 and 34, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches *wherein the subject individual exhibits a desired characteristic* (See at least Sun, Fig. 5i, wherein each patient exhibits a desired characteristic) Sun does not teach the desired characteristic is sensitive skin but that is a design choice and does not alter the claim limitations of the application. The motivation to combine both arts is the same as claim 19.
44. In regards to claim 35, Huyn teaches the claim limitations of claim 1, however Huyn does not explicitly teach but Sun teaches *further comprising evaluating a product on the subject individual* (See at least Sun Para. 0095 where a medical treatment is being physiological monitored as it is being administered to a patient). The motivation to combine both arts is the same as claim 19.
45. **Claims 62-67** recite substantially similar limitations as that already addressed in **19 and 27-35** and, as such, are rejected for similar reasons as given above.

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**Claims 6, 36-61, and 68-97 are rejected under 35. U.S.C 103(a) as being unpatentable over Huyn et al. (US 2002/0035486 A1) in view of Goldman et al. (US 2002/0082738 A1) and in further in view of Nicholson et al. (US 2005/0130321 A1).**

46. As per claims 6, 41, and 73, Huyn and Goldman teach the above claim limitations. Goldman further teaches *wherein the tree segmentation technique includes a classification and regression tree method* (See at least Goldman, Claim 5, wherein regression tree (CART) is taught). Huyn and Goldman do not explicitly teach however Nicholson teaches *the method according to claim 5, wherein the multivariate analysis includes a principal component analysis* (See at least Nicholson Para. 58).

It would have been obvious to one of ordinary skill in the medical art to combine computer-implemented questionnaire system as taught in Huyn with the different analysis techniques as taught in Goldman further with the principal component technique as taught in Nicholson. The combination would lead to different analysis techniques that generate secondary questions based on the responses of the first question.

47. **Claims 36-40, 42-61, 68-72, and 74-97** recite substantially similar limitations as that already addressed in **1-18, 20-26**, and, as such, are rejected for similar reasons as given above.

#### **Applicant's Argument's**

**Applicant's arguments filed 08/10/2010 have been fully considered but they are not persuasive.**

i. Applicant argues the examiner fails to set forth a *prima facie* case of obviousness therefore, there is no motivation to combine references and it constitutes an assertion of hindsight. The Examiner respectfully submits that establishing a *prima facie* case of obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Hedges*, 783 F.2d 1038, 1039, 228 USPQ 685,686 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785,788 (Fed. Cir. 1984); and *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143,147 (CCPA 1976). Using this standard, the Examiner respectfully submits that he has at least satisfied the burden of presenting a *prima facie* case of obviousness, since he has presented evidence of corresponding claim elements in the prior art and has expressly articulated the combinations and the motivations for combinations that fairly suggest Applicant's claimed invention.

In addition, the Examiner recognizes obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re DeLisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti et al*, 192 USPQ 278 (CCPA) that:

- (i) obviousness does not require absolute predictability;
- (ii) non-preferred embodiments of prior art must also be considered; and
- (iii) the question is not express teaching of references, but what they would suggest.

Additionally, the Examiner respectfully recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. However, although the Examiner agrees that the motivation or suggestion to make

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modifications must be articulated, it is respectfully contended that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969).

As such, it is respectfully submitted that an explanation based on logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner in the prior Office Action, *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter., 4/22/93).

With regard to the Appellant's argument that the combination of reference is improper because the Examiner reconstructs the claimed invention based on impermissible hindsight, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

ii. Applicant argues that Goldman and Huyn fail to disclose or suggest at least "selecting, via a computer system, a second question according to the first information and according to a diagnostic algorithm generated using at least one of a multivariate analysis and a tree segmentation technique." The examiner disagrees. In particularly Huyn, paragraph 37 and 92, teaches secondary questions are presented based on the response of the first question. Goldman teaches in paragraph 72, CART, CHAID which are both multivariate analysis and also decision trees and neural empirical modeling is also taught in paragraph 72.

### **Conclusion**



Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maroun Kanaan whose telephone number is (571) 270-1497. The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Robert Morgan, can be reached at the following telephone number: (571) 272-6773.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

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**Washington, D.C. 20231**

or faxed to **571-273-8300**.

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/C. Luke Gilligan/

Primary Examiner, Art Unit 3626